

Acids, Bases and Salts

Curd, lemon juice, orange juice and vinegar taste sour. These substances taste sour because they contain **acids**. The chemical nature of such substances is **acidic**.

Substances like Baking Soda which are bitter in taste and feel soapy on touching are known as **bases**. The nature of such substances is said to be **basic**.

Special type of substances is used to test whether a substance is acidic or basic. These substances are known as **indicators**. The indicators change their colour when added to a solution containing an acidic or a basic substance.

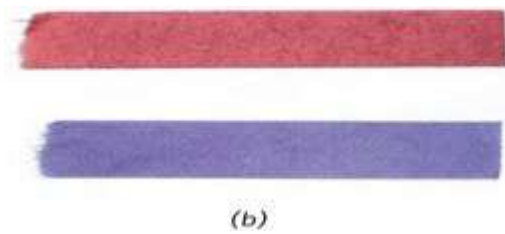
Do you know?	
Name of acid	Found in
Acetic acid	Vinegar
Formic acid	Ant's sting
Citric acid	Citrus fruits such as oranges, lemons, etc.
Lactic acid	Curd
Oxalic acid	Spinach
Ascorbic acid (Vitamin C)	Amla, Citrus fruits
Tartaric acid	Tamarind, grapes, unripe mangoes, etc
All the acids mentioned above occur in nature	
Name of base	Found in
Calcium hydroxide	Lime water
Ammonium hydroxide	Window cleaner
Sodium hydroxide/Potassium hydroxide	Soap
Magnesium hydroxide	Milk of magnesia

- **NATURAL INDICATORS AROUND US**

(1) Litmus: A natural dye – The most commonly used natural indicator is litmus. It is extracted from **lichens** (Fig. a). It has a mauve (purple) colour in distilled water. When added to an acidic solution, it turns red and when added to a basic solution, it turns blue. It is available in the form of a solution, or in the form of strips of paper, known as litmus paper. Generally, it is **available as red and blue litmus paper** (Fig. b).



(a)



(a) Lichens, and (b) Red and blue litmus paper

(2) Turmeric is another natural indicator

(3) China Rose as Indicator – China rose indicator turns acidic solutions to dark pink (magenta) and basic solutions to green.